

PHILOSOPHICAL TRANSACTIONS.

Monday, Octob. 19. 1668.

The Contents.

The Variations of the Magnetick Needle, predicted for many years following. Extracts of three Letters ; one, lately written by Monsieur De Bills, touching the true use of the Lymphatick Vessels ; the second, written by Mr. Stafford from the Bermudas, concerning Tydes, Whales, Spermaceti, strange Spiders-Webbs ; some Vegetables, and the Longevity of the Inhabitants of that Island ; the third, written from Paris, about the polishing of Telescopical Glasses by a Turn-lathe ; as also the making of an extraordinary Burning-glass at Milan. A Note concerning Empty Tubes formerly describ'd. Observations concerning Cochineel, accompanied with some Suggestions for finding and preparing such like Substances out of other Vegetables. Queries concerning Vegetation, especially the Motion of the Juices of Vegetables. Other Queries about the Use and Culture of the Kitchen-garden and Winter-greens. A suggestion for taking more notice, than hitherto hath been done, of the Juices of Trees, by Tapping. An Extract of a Letter from Dr. Nathanael Fairfax, about a Leaden Bullet voided by Urine. An Account of some Books : I. J. Hevelii COMETOGRAPHIA. II. Renati Des Cartes EPISTOLÆ sermone Latino. III. Scrutinium Chymicum VITRIOLI, Auth. Joh. Georgio Trumphio. IV. Francisci Dele Boe Sylvii PRAXIS MEDICÆ Idea nova, Lib. I.

The Variations of the Magnetick Needle predicted for many yeares following.

THE Doctrine of the Magnet and Magnetical Motions is yet so obscure, that what hitherto hath been discoursed and written upon that Subject, proves very unsatisfactory to Men,

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that consider the various *Phænomena* and effects of that Body. Whence we presume, it cannot be un-acceptable to *Philosophical Men*, to be still furnisht with new conjectures, and fresh occasions, serving to excite new thoughts, and to make farther Inquiries concerning this matter. For which purpose we shall here communicate to the Curious a *Table*, directing them to make Observations for the future, whereby a certain *Hypothesis* is designed to be confirm'd, which an Intelligent Mathematician and Teacher of Navigation in *England* (Mr. *Henry Bond*) entertains, but thinks not yet fit to declare to the World: 'Tis by vertue of that *Hypothesis*, that he hath Calculated the following *Table*; shewing, How the *Variations* of the *Magnetick Needle* will fall out for the years therein specified; which he conceives to be now *Westward*, and to have been so for some few years last past; whereas they were formerly *Eastward*. This Philosophical prediction is here made publick, to the end that Inquisitive Men may every where from time to time make Observations accordingly, either to verify or to invalidate the pretended *Theory*.

The Table Follows.

| Years. | The Variation West. | | Years. | The Variation West. | |
|--------|---------------------|------|--------|---------------------|------|
| | Gr. | Min. | | Gr. | Min. |
| 1663 | 1 | 56 | 1694 | 6 | 16 |
| 1669 | 2 | 7 | 1695 | 6 | 25 |
| 1670 | 2 | 18 | 1696 | 6 | 34 |
| 1671 | 2 | 28 | 1697 | 6 | 43 |
| 1672 | 2 | 38 | 1698 | 6 | 52 |
| 1673 | 2 | 49 | 1699 | 7 | 1 |
| 1674 | 2 | 59 | 1700 | 7 | 10 |
| 1675 | 3 | 9 | 1701 | 7 | 19 |
| 1676 | 3 | 19 | 1702 | 7 | 28 |
| 1677 | 3 | 30 | 1703 | 7 | 36 |
| 1678 | 3 | 40 | 1704 | 7 | 45 |
| 1679 | 3 | 50 | 1705 | 7 | 53 |
| 1680 | 4 | 0 | 1706 | 8 | 1 |
| 1681 | 4 | 10 | 1707 | 8 | 9 |
| 1682 | 4 | 20 | 1708 | 8 | 17 |
| 1683 | 4 | 30 | 1709 | 8 | 25 |
| 1684 | 4 | 40 | 1710 | 8 | 33 |
| 1685 | 4 | 50 | 1711 | 8 | 41 |
| 1686 | 5 | 0 | 1712 | 8 | 49 |
| 1687 | 5 | 10 | 1713 | 8 | 56 |
| 1688 | 5 | 19 | 1714 | 9 | 4 |
| 1689 | 5 | 29 | 1715 | 9 | 11 |
| 1690 | 5 | 39 | 1716 | 9 | 17½ |
| 1691 | 5 | 48 | | | |
| 1692 | 5 | 57 | | | |
| 1693 | 6 | 7 | | | |